

ABSTRACT OF THE DISCLOSURE

In a conventional N-channel MOSFET for an open-drain circuit, when a positive static electric charge is applied to its drain, there is no route by way of which to discharge the static electric charge, resulting in a rather low static withstand voltage. To overcome this, according to the invention, an open-drain N-channel MOSFET has a drain region formed of an N-type semiconductor layer, a P-type impurity diffusion layer formed within the drain region, two high-concentration N-type impurity diffusion layers formed within the drain region so as to sandwich the P-type impurity diffusion layer, and a drain electrode connected to the P-type impurity diffusion layer and to the two high-concentration N-type impurity diffusion layers. When a positive static electric charge is applied to the drain, a parasitic transistor appears that forms a route by way of which the static electric charge is discharged.